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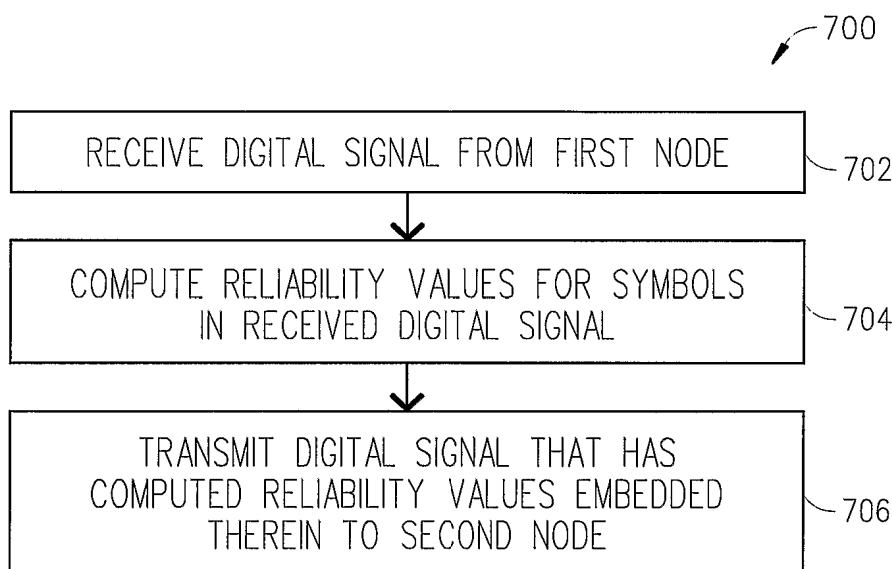
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(54) Title: RELAY STATION AND METHOD FOR ENABLING RELIABLE DIGITAL COMMUNICATIONS BETWEEN TWO NODES IN A WIRELESS RELAY BASED NETWORK



(57) Abstract: A relay station (606, 806a, 806b, 906a, 906b, 1006 and 1106) and a method (700) are described herein that enables reliable digital communications to occur between two nodes in a wireless relay based network (600, 800, 900, 1000 and 1100). The wireless relay based network includes a first node (602, 802, 902, 1002 and 1102) that transmits information in coded/modulated digital communications to a second node (604, 804, 904, 1004 and 1104) via one or more relay stations. And, each relay station is capable of: (1) receiving (702) a coded/modulated digital communication from the first node; (2) computing (704) a plurality of reliability values for a plurality of information symbols

or coded symbols in the received coded/modulated digital communication; and (3) transmitting (706) a coded/modulated digital communication that has the computed reliability values embedded therein to the second node.

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